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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,815	02/24/2004	Dietrich Scherzer	54166	1166

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NOVAK DRUCE DELUCA & QUIGG, LLP  
1300 EYE STREET NW  
SUITE 400 EAST  
WASHINGTON, DC 20005

EXAMINER

ZEMEL, IRINA SOPJIA

ART UNIT PAPER NUMBER

1711

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/784,815	Applicant(s) SCHERZER ET AL.	
	Examiner Irina S. Zemel	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 6-13 and 15-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-23 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2-24-2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicant's election with traverse of invention Group I, claims 1-5 and 14 in the reply filed on 12-5-2005 is acknowledged. The traversal is on the ground(s) that the inventions have a common link and that invention groups II-VI are all classified in one class.. This is not found persuasive because classification in different classes and lack of common technical link was not the reasons provided by the examiner why the inventions of Groups I-VI are independent and distinct, and why the inventive groups require separate searches and separate consideration of patentability. The applicants did not answer or traversed any of the reasons for holding the inventions independent and distinct set forth by the examiner in the previous office action,

The requirement is still deemed proper and is therefore made FINAL.

Claims 6-13 and 15-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention Groups, there being no allowable generic or linking claim.

### ***Claim Objections***

Claims 2, 3 and 5 are objected to because of the following informalities: Each of the claims 2, 3 and 5 contains a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim). Tthe claims are not indefinite per-se. However in each case, the narrower ranges are not considered claim limiting, i.e., for the purposes of art rejection, each of the recited claim limitation is met if the prior art discloses a corresponding element that falls within the

broader range only. It is suggested that applicants re-write claims containing broader/narrower limitations to exclude the narrower ranges and, if desirable, add additional dependent claims directed to the narrower ranges.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,629,745 to Hoki et al., (hereinafter "Hoki").

Hoki discloses open cell foams comprising high-temperature resistant thermoplastic with T<sub>g</sub> of about 220 C (Ultem 1000), which is a polyether ketone polymer, with the open cell content from 87 to 100%, and densities from about 65 to 210 g/l, and cell size as low as 600 um, which fully correspond to the claimed foams and its properties. See all comparative examples in Table 2.

The invention as claimed, thus, is fully anticipated by the disclosure of the Hoki reference.

Claims 1, 2, 4,5 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,934,594 to Ezawa et al., (hereinafter "Ezawa").

Ezawa discloses open cell foams comprising high-temperature resistant polyetherimide thermoplastic with T<sub>g</sub> of above 180 C. The foams have the open cell

content of about 55%, cell size of about 800um, and density of about 110 g/l, which fully correspond to the claimed foams and its properties. See comparative example 2 in columns 6-7. The reference further expressly discloses molding sheets produced from the foamed compositions of illustrative examples.

The invention as claimed, thus, is fully anticipated by the disclosure of Ezawa reference.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ezawa in combination with applicants admission on the record.

The reference, in comparative example 2, discloses foams with the open cell content of about 55%, as discusses above. However, the reference expressly teaches that the only difference in obtaining foams with low content of open cells and higher content of open cells is the processing temperature at the extrusion die. See illustrative example 1 and comparative example 2. The reference further expressly teaches that "Further, the closed cell content is suitably controlled by the temperature of the kneaded mass in the extruder and cooling conditions after being delivered from the die slit. The closed cell content is preferably maintained at 50% or more." See column 5, lines 42-46, thus providing expressed guidance as to what parameters needs to be adjusted and

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in what way to control the open cell content. It is well known in the art that some applications require the foams to have open cell structure as evidenced by applicants own admission on page 3 of the instant specification. Therefore, it would have been obvious for an ordinary artisan to produce foams with high content of open cells from materials disclosed by Ezawa and utilizing explicit teachings of Ezawa on how to obtain such open cell foams for the applications requiring open cell foams.

***Information Disclosure Statement***

Applicants should note that all reference listed in the IDS that do not have English translation were only considered to the extent of their relevancy provided by the applicants statements and discussion of those references in the instant specification.

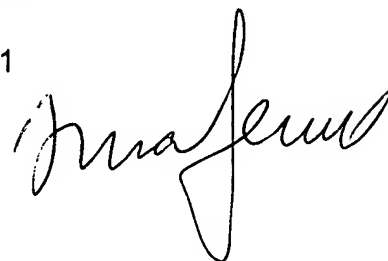
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Irina S. Zemel  
Examiner  
Art Unit 1711

A handwritten signature in black ink, appearing to read 'Irina Zemel', with a stylized, flowing script.

ISZ